



Third Announcement/Call for Papers

The next steps in the robotic exploration of the solar system involve missions to planets and satellites with significant atmospheres. The four major planets, Jupiter, Saturn, Uranus and Neptune have bottomless atmospheric oceans, but Mars, Venus and Saturn's moon Titan have solid accessible surfaces. The International Planetary Probe Workshop series was established to bring together scientists, spacecraft engineers, technologists, and mission designers interested in the technological challenges and scientific opportunities involved in entry, descent and flight in these planetary atmospheres and scientific exploration of their atmospheres.

OBJECTIVES OF FOURTH WORKSHOP (IPPW-4)

The Fourth Workshop (IPPW-4), to be held in Pasadena in June 2006, will build upon the accomplishments of the three earlier workshops - two held in Europe (Lisbon, Portugal, 2003 and Athens, Greece, 2005) and one in the USA (NASA Ames Research Center, 2004). As with previous workshops, key objectives include fostering international involvement in planetary exploration with probes and engaging the next generation of scientists and engineers in this exciting field.

For IPPW-4 we are expecting a continuing focus on outer planet probe missions as well as concepts for probe and aerial platform missions to Mars, Venus and Titan. There will be a session on technologies for the extreme environments experienced in entry, descent and flight at these targets. Applications of Earth entry and descent science and technology will also be featured, including data from the Stardust mission which returned cometary samples to Earth on January 15, 2006. To accommodate additional papers, the workshop format has been changed to include parallel sessions on the third day of the workshop.

Immediately preceding the workshop, a two day short course "In Situ Instruments for Planetary Probes and Aerial Platforms" will be held on June 25-26.

WORKSHOP GOALS

The general goals of the International Planetary Program Workshop Series are to:

- Review the state-of-the-art in science, mission design, engineering implementation and technology for the in situ robotic exploration of planets with atmospheres.
- Share ideas, mission opportunities, and emerging technologies to enable future mission success.
- Serve as a forum for initiating discussions on innovative methodologies and techniques for future missions to explore planets and satellites with atmospheres.
- Provide young scientists and engineers in the field of entry, descent, and flight in planetary atmospheres with the opportunity to learn from experienced researchers and practitioners.
- Foster international collaboration among the communities of scientists, engineers, and mission designers interested in planetary probes.

4th International Planetary Probe Workshop

June 27-30, 2006
Pasadena, California, USA

IPPW-4

LOCATION: Pasadena Hilton, Pasadena , California , USA

SCHEDULE: The workshop will last for 3-1/2 days beginning on the morning of Tuesday, June 27, 2006 and will end before noon on Friday, June 30, 2006.

SHORT COURSE: Immediately preceding the workshop, on June 25-26, 2006, a two-day short course “In Situ Instruments for Planetary Probes and Aerial Platforms” will be offered.

REGISTRATION: Registration costs for the Workshop and Short Course are:

Workshop

Regular: \$300 (*after May 15, 2006: \$350*)

Student: \$90

Short Course

Regular and Student: \$95 (*after May 15, 2006: \$115*)

BANQUET: Wednesday, June 28 at the California Institute of Technology Athenaeum.

The cost of the banquet is included in the workshop registration fees.

HOTEL: The Pasadena Hilton, 168 S. Los Robles Avenue, Pasadena, CA 91101

Special Workshop rates for the Pasadena Hilton are:

Single room/Double room: \$96.00 (\$25 extra per additional person in room)

Hotel reservations must be made directly with the Pasadena Hilton. To ensure the workshop rates, please mention IPPW-4/International Planetary Probe Workshop, or click on the [IPPW Group Reservation](#) link on the IPPW homepage.

Hotel Phone: 626-577-1000

Hotel Fax: 626-584-3148

<http://www.pasadenacal.com/hilton.htm>

Additional information on the workshop and short course registration, hotel reservations, and the short course and workshop program is available on the workshop website at: <http://ippw.jpl.nasa.gov>

MEALS: The Workshop registration fee includes continental breakfast on June 27-30 and lunch on June 27 and 28.



CALL FOR PAPERS

Papers and Posters on the workshop topics and related topics are invited. Information on how to submit abstracts is available at <http://ippw.jpl.nasa.gov/WORKSHOP/CallforPapers/>.

Please Note That the Deadline for Abstract Submission Is May 5, 2006.

Oral presentations will be limited to 15 minutes. The preferred format for submission of abstracts is MS Word. To the extent possible, please avoid any figures or complex mathematical expressions in the abstract. Due to space and time constraints, only a limited number of papers can be accepted as oral presentations. However, all presentations (oral and poster) that are accepted will be eligible for inclusion in the proceedings. A notice of paper acceptance will be sent to authors of papers selected by **May 12, 2006**.

STUDENTS

A limited number of Student scholarships will be available. Information on how to apply is available online at: <http://ippw.jpl.nasa.gov/WORKSHOP/StudentMatters>.

WORKSHOP SESSIONS

The 4th International Planetary Probe Workshop comprises sessions on the programmatic, technical, scientific, and mission design issues of atmospheric entry and descent exploration of solar system bodies. Papers and posters addressing the following topics are encouraged:

- Scientific results of past atmospheric entry probe missions, with implications for future explorations
- Applications of experiences gained from Earth atmospheric entry studies to future planetary probe missions
- Future mission concepts and studies
- Technical, environmental, and mission design issues of atmospheric entry probe missions
- Sensors, Instruments and Sample Acquisition Systems
- Technologies that manage thermal and pressure environments throughout the probe mission
- Capabilities and prospects of existing and emerging electronics, communications and battery technologies for operation in extreme environments encountered by the atmospheric probe missions
- Atmospheric entry, descent, and mobility technologies including thermal protection systems, parachute technologies, balloons, gliders etc.

The current IPPW-4 program and list of Session Chairs can be found at the workshop website at:

<http://ippw.jpl.nasa.gov/WORKSHOP/WorkshopProgram/>

CONTACT INFORMATION: Please contact the IPPW-4 Secretariat via E-mail at:
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